

BAB VI

KESIMPULAN DAN SARAN

6.1. Kesimpulan

1. Struktur atas jembatan dirancang ulang menjadi jembatan rangka baja tipe *Warren Truss* dengan tinggi rangka jembatan 5,00 m.
2. Gelagar memanjang menggunakan baja profil WF 350×250×8×12 dan gelagar melintang menggunakan baja profil WF 900×300×18×34.
3. Penulangan Pelat lantai kendaraan menggunakan tulangan D16-200 dengan ketebalan plat lantai 20,00 cm.
4. Rangka baja jembatan menggunakan profil WF 900×300×18×34 untuk gelagar melintang bawah, profil WF 800×300×16×30 untuk gelagar memanjang utama atas, gelagar memanjang utama bawah dan batang diagonal, WF 600×300×14×23 untuk gelagar melintang atas serta WF 200×100×5,5×8 untuk ikatan angin.

6.2. Saran

1. Dalam perencanaan dan perancangan struktur jembatan sebaiknya data-data yang berkaitan dengan perencanaan jembatan baik itu data primer maupun data sekunder harus lengkap. Data-data tersebut nantinya akan digunakan sebagai bahan pemikiran dan pertimbangan dalam perencanaan dan perancangan jembatan.

2. *Input* data harus dilakukan dengan teliti sehingga dapat dilakukan analisis struktur yang akurat.
3. Dalam melakukan perancangan elemen-elemen struktur jembatan, sebaiknya mempertimbangkan kemudahan pelaksanaan di lapangan serta kemudahan memperoleh bahan/material yang dibutuhkan.



DAFTAR PUSTAKA

- Amon, R., Knobloch, B., Mazumder, A., 1988, *Perencanaan Konstruksi Baja untuk Insinyur dan Arsitek*, Pradnya Paramita, Jakarta.
- Departemen Pekerjaan Umum, 1987, *Pedoman Perencanaan Pembebanan Jembatan Jalan Raya*, Yayasan Badan Penerbit PU, Jakarta.
- Departemen Pekerjaan Umum, 1987, *Pedoman Perencanaan Bangunan Baja untuk Gedung*, Yayasan Badan Penerbit PU, Jakarta.
- Dipohusodo, I., 1994, *Struktur Beton Bertulang*, PT Gramedia Pustaka Utama, Jakarta.
- Gunawan, R., 1988, *Tabel Profil Konstruksi Baja*, Kanisius, Yogyakarta.
- Salmon, C.G, Johnson, J.E., 1990, *Struktur Baja, Desain dan Perilaku*, Gramedia, Jakarta.
- Supriyadi, B., 1997, *Analisis Struktur Jembatan*, Biro Penerbit KMTS FT UGM, Yogyakarta.
- Supriyadi, B., Muntohar A.S., 2000, *Jembatan*, Biro Penerbit KMTS FT UGM, Yogyakarta.
- Wang, C.K., Salmon, C.G, 1985, *Disain Beton Bertulang*, Erlangga, Jakarta.



YOGYA

LOAD COMBINATION MULTIPLIERS

COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
COMB1	ADD				COMB1
		DL	1.0000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		R	1.0000	STATIC (LIVE)	
		A	1.0000	STATIC (WIND)	
		E	1.0000	STATIC (QUAKE)	

YOGYA

JOINT DISPLACEMENTS

JOINT	LOAD	U1	U2	U3	R1	R2	R3
C1	DL	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C1	COMB1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C2	DL	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C2	COMB1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C3	DL	1.930E-04	1.426E-06	-5.369E-03	0.0000	0.0000	0.0000
C3	COMB1	6.356E-04	1.612E-04	-0.0114	0.0000	0.0000	0.0000
C4	DL	1.930E-04	-1.426E-06	-5.369E-03	0.0000	0.0000	0.0000
C4	COMB1	6.349E-04	1.445E-04	-0.0113	0.0000	0.0000	0.0000
C5	DL	7.307E-04	5.374E-05	-9.626E-03	0.0000	0.0000	0.0000
C5	COMB1	1.937E-03	3.358E-04	-0.0203	0.0000	0.0000	0.0000
C6	DL	7.307E-04	-5.374E-05	-9.626E-03	0.0000	0.0000	0.0000
C6	COMB1	1.931E-03	7.131E-05	-0.0202	0.0000	0.0000	0.0000
C7	DL	1.473E-03	3.631E-06	-0.0123	0.0000	0.0000	0.0000
C7	COMB1	3.617E-03	2.736E-04	-0.0260	0.0000	0.0000	0.0000
C8	DL	1.473E-03	-3.631E-06	-0.0123	0.0000	0.0000	0.0000
C8	COMB1	3.621E-03	2.465E-04	-0.0259	0.0000	0.0000	0.0000
C9	DL	2.328E-03	7.364E-05	-0.0133	0.0000	0.0000	0.0000
C9	COMB1	5.493E-03	4.264E-04	-0.0279	0.0000	0.0000	0.0000
C10	DL	2.328E-03	-7.364E-05	-0.0133	0.0000	0.0000	0.0000
C10	COMB1	5.504E-03	9.476E-05	-0.0278	0.0000	0.0000	0.0000
C11	DL	3.184E-03	3.631E-06	-0.0123	0.0000	0.0000	0.0000
C11	COMB1	7.337E-03	2.728E-04	-0.0258	0.0000	0.0000	0.0000
C12	DL	3.184E-03	-3.631E-06	-0.0123	0.0000	0.0000	0.0000
C12	COMB1	7.359E-03	2.468E-04	-0.0257	0.0000	0.0000	0.0000
C13	DL	3.926E-03	5.374E-05	-9.626E-03	0.0000	0.0000	0.0000
C13	COMB1	8.919E-03	3.234E-04	-0.0201	0.0000	0.0000	0.0000
C14	DL	3.926E-03	-5.374E-05	-9.626E-03	0.0000	0.0000	0.0000
C14	COMB1	8.952E-03	8.419E-05	-0.0200	0.0000	0.0000	0.0000
C15	DL	4.464E-03	1.426E-06	-5.369E-03	0.0000	0.0000	0.0000
C15	COMB1	0.0101	1.589E-04	-0.0112	0.0000	0.0000	0.0000
C16	DL	4.464E-03	-1.426E-06	-5.369E-03	0.0000	0.0000	0.0000
C16	COMB1	0.0101	1.434E-04	-0.0112	0.0000	0.0000	0.0000
C17	DL	4.657E-03	0.0000	0.0000	0.0000	0.0000	0.0000

C17	COMB1	0.0105	0.0000	0.0000	0.0000	0.0000	0.0000
C18	DL	4.657E-03	0.0000	0.0000	0.0000	0.0000	0.0000
C18	COMB1	0.0105	0.0000	0.0000	0.0000	0.0000	0.0000
C19	DL	4.738E-03	-1.407E-05	-2.750E-03	0.0000	0.0000	0.0000
C19	COMB1	0.0103	1.123E-04	-5.860E-03	0.0000	0.0000	0.0000
C20	DL	4.738E-03	1.407E-05	-2.750E-03	0.0000	0.0000	0.0000
C20	COMB1	0.0103	1.691E-04	-5.836E-03	0.0000	0.0000	0.0000
C21	DL	4.332E-03	-3.186E-05	-7.619E-03	0.0000	0.0000	0.0000
C21	COMB1	9.490E-03	1.123E-04	-0.0161	0.0000	0.0000	0.0000
C22	DL	4.332E-03	3.186E-05	-7.619E-03	0.0000	0.0000	0.0000
C22	COMB1	9.464E-03	2.401E-04	-0.0161	0.0000	0.0000	0.0000
C23	DL	3.642E-03	-4.554E-05	-0.0111	0.0000	0.0000	0.0000
C23	COMB1	8.085E-03	1.169E-04	-0.0235	0.0000	0.0000	0.0000
C24	DL	3.642E-03	4.554E-05	-0.0111	0.0000	0.0000	0.0000
C24	COMB1	8.071E-03	3.001E-04	-0.0234	0.0000	0.0000	0.0000
C25	DL	2.785E-03	-5.178E-05	-0.0130	0.0000	0.0000	0.0000
C25	COMB1	6.337E-03	1.225E-04	-0.0273	0.0000	0.0000	0.0000
C26	DL	2.785E-03	5.178E-05	-0.0130	0.0000	0.0000	0.0000
C26	COMB1	6.341E-03	3.314E-04	-0.0272	0.0000	0.0000	0.0000
C27	DL	1.872E-03	-5.178E-05	-0.0130	0.0000	0.0000	0.0000
C27	COMB1	4.475E-03	1.220E-04	-0.0272	0.0000	0.0000	0.0000
C28	DL	1.872E-03	5.178E-05	-0.0130	0.0000	0.0000	0.0000
C28	COMB1	4.496E-03	3.309E-04	-0.0271	0.0000	0.0000	0.0000
C29	DL	1.015E-03	-4.554E-05	-0.0111	0.0000	0.0000	0.0000
C29	COMB1	2.726E-03	1.148E-04	-0.0233	0.0000	0.0000	0.0000
C30	DL	1.015E-03	4.554E-05	-0.0111	0.0000	0.0000	0.0000
C30	COMB1	2.765E-03	2.989E-04	-0.0232	0.0000	0.0000	0.0000
C31	DL	3.250E-04	-3.186E-05	-7.619E-03	0.0000	0.0000	0.0000
C31	COMB1	1.319E-03	1.082E-04	-0.0159	0.0000	0.0000	0.0000
C32	DL	3.250E-04	3.186E-05	-7.619E-03	0.0000	0.0000	0.0000
C32	COMB1	1.371E-03	2.369E-04	-0.0158	0.0000	0.0000	0.0000
C33	DL	-8.146E-05	-1.407E-05	-2.750E-03	0.0000	0.0000	0.0000
C33	COMB1	4.875E-04	1.051E-04	-5.726E-03	0.0000	0.0000	0.0000
C34	DL	-8.146E-05	1.407E-05	-2.750E-03	0.0000	0.0000	0.0000
C34	COMB1	5.468E-04	1.621E-04	-5.706E-03	0.0000	0.0000	0.0000

YOGYA

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COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
COMB1	ADD				COMB1
		DL	1.0000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		R	1.0000	STATIC (LIVE)	
		A	1.0000	STATIC (WIND)	
		E	1.0000	STATIC (QUAKE)	

YOGYA

FRAME ELEMENT FORCES

FRAME	LOAD	LOC	P	V2	V3	T	M2	M3
1	COMB1							
		0.00	13068.65	335.72	-4.37	0.00	-26.33	928.04
		3.01	13068.65	199.53	-4.37	0.00	-13.16	122.38
		6.02	13068.65	63.35	-4.37	0.00	0.00	-273.31
		9.03	13068.65	-72.84	-4.37	0.00	13.16	-259.04
		12.04	13068.65	-209.02	-4.37	0.00	26.33	165.21
2	COMB1							
		0.00	10130.55	-335.97	-5.23	0.00	-31.51	-929.56
		3.01	10130.55	-199.79	-5.23	0.00	-15.75	-123.13
		6.02	10130.55	-63.60	-5.23	0.00	0.00	273.31
		9.03	10130.55	72.58	-5.23	0.00	15.75	259.79
		12.04	10130.55	208.77	-5.23	0.00	31.51	-163.70
3	COMB1							
		0.00	21411.73	295.69	-8.85	0.00	-53.29	687.02
		3.01	21411.73	159.50	-8.85	0.00	-26.65	1.86
		6.02	21411.73	23.32	-8.85	0.00	0.00	-273.31
		9.03	21411.73	-112.87	-8.85	0.00	26.65	-138.52
		12.04	21411.73	-249.05	-8.85	0.00	53.29	406.24
4	COMB1							
		0.00	20540.56	-296.25	-9.08	0.00	-54.64	-690.43
		3.01	20540.56	-160.07	-9.08	0.00	-27.32	-3.57
		6.02	20540.56	-23.88	-9.08	0.00	0.00	273.31
		9.03	20540.56	112.30	-9.08	0.00	27.32	140.23
		12.04	20540.56	248.49	-9.08	0.00	54.64	-402.82
5	COMB1							
		0.00	19971.52	247.88	-8.81	0.00	-53.04	399.15
		3.01	19971.52	111.69	-8.81	0.00	-26.52	-142.07
		6.02	19971.52	-24.49	-8.81	0.00	0.00	-273.31
		9.03	19971.52	-160.68	-8.81	0.00	26.52	5.41
		12.04	19971.52	-296.86	-8.81	0.00	53.04	694.10
6	COMB1							
		0.00	20512.74	-248.43	-8.47	0.00	-50.99	-402.46
		3.01	20512.74	-112.24	-8.47	0.00	-25.50	140.41
		6.02	20512.74	23.94	-8.47	0.00	0.00	273.31
		9.03	20512.74	160.13	-8.47	0.00	25.50	-3.76
		12.04	20512.74	296.32	-8.47	0.00	50.99	-690.80
7	COMB1							
		0.00	7954.98	209.40	-4.39	0.00	-26.44	167.48
		3.01	7954.98	73.21	-4.39	0.00	-13.22	-257.90

	6.02	7954.98	-62.97	-4.39	0.00	0.00	-273.31
	9.03	7954.98	-199.16	-4.39	0.00	13.22	121.24
	12.04	7954.98	-335.34	-4.39	0.00	26.44	925.77
8	COMB1						
	0.00	10444.97	-209.63	-3.37	0.00	-20.27	-168.89
	3.01	10444.97	-73.45	-3.37	0.00	-10.14	257.20
	6.02	10444.97	62.74	-3.37	0.00	0.00	273.31
	9.03	10444.97	198.92	-3.37	0.00	10.14	-120.54
	12.04	10444.97	335.11	-3.37	0.00	20.27	-924.37
F1	COMB1						
	0.00	0.00	-22601.98	1259.35	0.00	2177.07	-38421.59
	2.25	0.00	-12454.82	723.45	0.00	-254.55	4586.36
	4.50	0.00	-3941.70	241.15	0.00	-1158.86	20076.16
	6.75	0.00	12454.82	-723.45	0.00	-254.55	4586.36
	9.00	0.00	22601.98	-1259.35	0.00	2177.07	-38421.59
F2	COMB1						
	0.00	97474.09	-1357.75	6371.25	0.00	12113.98	-2715.50
	1.00	97474.09	-1357.75	6135.56	0.00	5860.58	-1357.75
	2.00	97474.09	-1357.75	5899.86	0.00	-157.13	0.00
	3.00	97474.09	-1357.75	5664.17	0.00	-5939.14	1357.75
	4.00	97474.09	-1357.75	5428.48	0.00	-11485.47	2715.50
F3	COMB1						
	0.00	97370.84	-1217.57	6346.04	0.00	12063.56	-2435.13
	1.00	97370.84	-1217.57	6110.34	0.00	5835.37	-1217.57
	2.00	97370.84	-1217.57	5874.65	0.00	-157.13	0.00
	3.00	97370.84	-1217.57	5638.96	0.00	-5913.93	1217.57
	4.00	97370.84	-1217.57	5403.26	0.00	-11435.04	2435.13
F4	COMB1						
	0.00	-1346.70	-43873.28	1259.32	0.00	2176.91	-74633.38
	2.25	-1346.70	-24208.66	723.41	0.00	-254.63	9096.90
	4.50	-1346.70	-7812.14	241.11	0.00	-1158.86	39207.75
	6.75	-1346.70	24351.17	-723.49	0.00	-254.47	8776.25
	9.00	-1346.70	44015.79	-1259.39	0.00	2177.23	-75274.68
F5	COMB1						
	0.00	199621.22	-1471.23	5095.31	0.00	9562.11	-2942.47
	1.00	199621.22	-1471.23	4859.62	0.00	4584.64	-1471.23
	2.00	199621.22	-1471.23	4623.92	0.00	-157.13	0.00
	3.00	199621.22	-1471.23	4388.23	0.00	-4663.21	1471.23
	4.00	199621.22	-1471.23	4152.54	0.00	-8933.59	2942.47
F6	COMB1						
	0.00	198849.90	616.73	5078.95	0.00	9529.38	1233.47
	1.00	198849.90	616.73	4843.25	0.00	4568.28	616.73
	2.00	198849.90	616.73	4607.56	0.00	-157.13	0.00
	3.00	198849.90	616.73	4371.87	0.00	-4646.84	-616.73
	4.00	198849.90	616.73	4136.17	0.00	-8900.86	-1233.47
F7	COMB1						
	0.00	-21405.31	-43827.04	1259.06	0.00	2175.73	-74425.28
	2.25	-21405.31	-24162.42	723.15	0.00	-255.22	9200.95
	4.50	-21405.31	-7765.90	240.85	0.00	-1158.86	39207.75
	6.75	-21405.31	24397.42	-723.75	0.00	-253.88	8672.20
	9.00	-21405.31	44062.04	-1259.65	0.00	2178.41	-75482.78
F8	COMB1						
	0.00	257680.56	523.99	3399.26	0.00	6170.00	1047.98
	1.00	257680.56	523.99	3163.57	0.00	2888.59	523.99
	2.00	257680.56	523.99	2927.87	0.00	-157.13	0.00
	3.00	257680.56	523.99	2692.18	0.00	-2967.15	-523.99
	4.00	257680.56	523.99	2456.49	0.00	-5541.49	-1047.98
F9	COMB1						
	0.00	259064.63	-1475.93	3390.78	0.00	6153.05	-2951.86
	1.00	259064.63	-1475.93	3155.09	0.00	2880.12	-1475.93
	2.00	259064.63	-1475.93	2919.40	0.00	-157.13	0.00
	3.00	259064.63	-1475.93	2683.71	0.00	-2958.68	1475.93
	4.00	259064.63	-1475.93	2448.01	0.00	-5524.54	2951.86

F10	COMB1	0.00	-2192.55	-43803.09	1259.53	0.00	2177.85	-74317.51
		2.25	-2192.55	-24138.47	723.62	0.00	-254.16	9254.83
		4.50	-2192.55	-7741.95	241.32	0.00	-1158.86	39207.75
		6.75	-2192.55	24421.37	-723.28	0.00	-254.94	8618.31
		9.00	-2192.55	44085.99	-1259.18	0.00	2176.29	-75590.56
F11	COMB1	0.00	286638.08	-1287.84	1454.04	0.00	2279.57	-2575.68
		1.00	286638.08	-1287.84	1218.35	0.00	943.37	-1287.84
		2.00	286638.08	-1287.84	982.66	0.00	-157.13	0.00
		3.00	286638.08	-1287.84	746.96	0.00	-1021.94	1287.84
		4.00	286638.08	-1287.84	511.27	0.00	-1651.06	2575.68
F12	COMB1	0.00	285881.42	1278.36	1451.75	0.00	2274.98	2556.73
		1.00	285881.42	1278.36	1216.06	0.00	941.08	1278.36
		2.00	285881.42	1278.36	980.36	0.00	-157.13	0.00
		3.00	285881.42	1278.36	744.67	0.00	-1019.64	-1278.36
		4.00	285881.42	1278.36	508.98	0.00	-1646.47	-2556.73
F13	COMB1	0.00	-26845.46	-43796.60	1259.95	0.00	2179.76	-74288.32
		2.25	-26845.46	-24131.98	724.05	0.00	-253.21	9269.43
		4.50	-26845.46	-7735.46	241.75	0.00	-1158.86	39207.75
		6.75	-26845.46	24427.85	-722.85	0.00	-255.90	8603.72
		9.00	-26845.46	44092.47	-1258.76	0.00	2174.38	-75619.74
F14	COMB1	0.00	282875.59	1294.81	-576.04	0.00	-1780.59	2589.62
		1.00	282875.59	1294.81	-811.73	0.00	-1086.70	1294.81
		2.00	282875.59	1294.81	-1047.42	0.00	-157.13	0.00
		3.00	282875.59	1294.81	-1283.12	0.00	1008.14	-1294.81
		4.00	282875.59	1294.81	-1518.81	0.00	2409.10	-2589.62
F15	COMB1	0.00	284397.47	-1281.15	-571.92	0.00	-1772.35	-2562.30
		1.00	284397.47	-1281.15	-807.61	0.00	-1082.59	-1281.15
		2.00	284397.47	-1281.15	-1043.31	0.00	-157.13	0.00
		3.00	284397.47	-1281.15	-1279.00	0.00	1004.02	1281.15
		4.00	284397.47	-1281.15	-1514.69	0.00	2400.87	2562.30
F16	COMB1	0.00	-2098.79	-43808.23	1260.47	0.00	2182.10	-74340.67
		2.25	-2098.79	-24143.61	724.57	0.00	-252.04	9243.26
		4.50	-2098.79	-7747.10	242.27	0.00	-1158.86	39207.75
		6.75	-2098.79	24416.22	-722.33	0.00	-257.07	8629.89
		9.00	-2098.79	44080.84	-1258.24	0.00	2172.04	-75567.40
F17	COMB1	0.00	242598.47	-427.10	-2495.63	0.00	-5619.78	-854.20
		1.00	242598.47	-427.10	-2731.33	0.00	-3006.30	-427.10
		2.00	242598.47	-427.10	-2967.02	0.00	-157.13	0.00
		3.00	242598.47	-427.10	-3202.71	0.00	2927.74	427.10
		4.00	242598.47	-427.10	-3438.41	0.00	6248.30	854.20
F18	COMB1	0.00	244386.88	1370.21	-2485.95	0.00	-5600.41	2740.42
		1.00	244386.88	1370.21	-2721.64	0.00	-2996.61	1370.21
		2.00	244386.88	1370.21	-2957.33	0.00	-157.13	0.00
		3.00	244386.88	1370.21	-3193.02	0.00	2918.05	-1370.21
		4.00	244386.88	1370.21	-3428.72	0.00	6228.92	-2740.42
F19	COMB1	0.00	-19365.16	-43835.61	1261.08	0.00	2184.84	-74463.88
		2.25	-19365.16	-24170.99	725.18	0.00	-250.66	9181.65
		4.50	-19365.16	-7774.48	242.88	0.00	-1158.86	39207.75
		6.75	-19365.16	24388.84	-721.72	0.00	-258.44	8691.50
		9.00	-19365.16	44053.46	-1257.63	0.00	2169.29	-75444.18

F20	COMB1	0.00	174949.79	1386.12	-4140.14	0.00	-8908.80	2772.25
		1.00	174949.79	1386.12	-4375.84	0.00	-4650.81	1386.12
		2.00	174949.79	1386.12	-4611.53	0.00	-157.13	0.00
		3.00	174949.79	1386.12	-4847.22	0.00	4572.25	-1386.12
		4.00	174949.79	1386.12	-5082.92	0.00	9537.32	-2772.25
F21	COMB1	0.00	175242.92	-499.25	-4124.01	0.00	-8876.53	-998.49
		1.00	175242.92	-499.25	-4359.70	0.00	-4634.68	-499.25
		2.00	175242.92	-499.25	-4595.40	0.00	-157.13	0.00
		3.00	175242.92	-499.25	-4831.09	0.00	4556.11	499.25
		4.00	175242.92	-499.25	-5066.78	0.00	9505.05	998.49
F22	COMB1	0.00	-1252.84	-43881.21	1261.18	0.00	2185.29	-74669.05
		2.25	-1252.84	-24216.59	725.28	0.00	-250.44	9079.06
		4.50	-1252.84	-7820.07	242.98	0.00	-1158.86	39207.75
		6.75	-1252.84	24343.25	-721.62	0.00	-258.66	8794.08
		9.00	-1252.84	44007.87	-1257.53	0.00	2168.84	-75239.01
F23	COMB1	0.00	62172.07	1339.00	-5336.96	0.00	-11302.43	2678.00
		1.00	62172.07	1339.00	-5572.65	0.00	-5847.63	1339.00
		2.00	62172.07	1339.00	-5808.35	0.00	-157.13	0.00
		3.00	62172.07	1339.00	-6044.04	0.00	5769.06	-1339.00
		4.00	62172.07	1339.00	-6279.73	0.00	11930.95	-2678.00
F24	COMB1	0.00	63301.53	1208.59	-5314.55	0.00	-11257.62	2417.17
		1.00	63301.53	1208.59	-5550.24	0.00	-5825.22	1208.59
		2.00	63301.53	1208.59	-5785.94	0.00	-157.13	0.00
		3.00	63301.53	1208.59	-6021.63	0.00	5746.65	-1208.59
		4.00	63301.53	1208.59	-6257.32	0.00	11886.13	-2417.17
F25	COMB1	0.00	0.00	-22601.98	1261.57	0.00	2187.03	-38421.59
		2.25	0.00	-12454.82	725.66	0.00	-249.57	4586.36
		4.50	0.00	-3941.70	243.36	0.00	-1158.86	20076.16
		6.75	0.00	12454.82	-721.24	0.00	-259.53	4586.36
		9.00	0.00	22601.98	-1257.14	0.00	2167.11	-38421.59
F26	COMB1	0.00	-183813.78	-455.56	2752.64	0.00	6988.64	-1226.63
		2.69	-183224.55	-455.56	2516.95	0.00	-105.77	0.00
		5.39	-182635.31	-455.56	2281.26	0.00	-6565.56	1226.63
F27	COMB1	0.00	-182632.52	-686.17	2744.09	0.00	6965.62	-1847.57
		2.69	-182043.29	-686.17	2508.40	0.00	-105.77	0.00
		5.39	-181454.05	-686.17	2272.71	0.00	-6542.54	1847.57
F28	COMB1	0.00	173987.67	-198.30	-2128.23	0.00	-6153.52	-533.93
		2.69	174576.90	-198.30	-2363.92	0.00	-105.77	0.00
		5.39	175166.13	-198.30	-2599.62	0.00	6576.60	533.93
F29	COMB1	0.00	172806.41	99.82	-2119.84	0.00	-6130.92	268.78
		2.69	173395.64	99.82	-2355.53	0.00	-105.77	0.00
		5.39	173984.87	99.82	-2591.22	0.00	6554.00	-268.78
F30	COMB1	0.00	-126305.51	198.09	2371.64	0.00	5962.76	533.37
		2.69	-125716.28	198.09	2135.95	0.00	-105.77	0.00
		5.39	-125127.05	198.09	1900.26	0.00	-5539.68	-533.37
F31	COMB1	0.00	-125651.09	-387.78	2365.23	0.00	5945.50	-1044.13
		2.69	-125061.86	-387.78	2129.54	0.00	-105.77	0.00
		5.39	-124472.62	-387.78	1893.85	0.00	-5522.42	1044.13

F32	COMB1	0.00	123230.39	-906.60	-1598.75	0.00	-4727.86	-2441.08
		2.69	123819.63	-906.60	-1834.45	0.00	-105.77	0.00
		5.39	124408.86	-906.60	-2070.14	0.00	5150.94	2441.08
F33	COMB1	0.00	122504.37	684.78	-1593.45	0.00	-4713.57	1843.83
		2.69	123093.60	684.78	-1829.14	0.00	-105.77	0.00
		5.39	123682.84	684.78	-2064.83	0.00	5136.66	-1843.83
F34	COMB1	0.00	-75560.33	888.11	1709.38	0.00	4179.57	2391.30
		2.69	-74971.09	888.11	1473.69	0.00	-105.77	0.00
		5.39	-74381.86	888.11	1237.99	0.00	-3756.49	-2391.30
F35	COMB1	0.00	-75261.16	-928.14	1707.35	0.00	4174.09	-2499.10
		2.69	-74671.92	-928.14	1471.65	0.00	-105.77	0.00
		5.39	-74082.69	-928.14	1235.96	0.00	-3751.00	2499.10
F36	COMB1	0.00	72898.82	-635.77	-849.53	0.00	-2710.50	-1711.86
		2.69	73488.05	-635.77	-1085.22	0.00	-105.77	0.00
		5.39	74077.28	-635.77	-1320.91	0.00	3133.58	1711.86
F37	COMB1	0.00	72514.76	217.37	-845.35	0.00	-2699.25	585.30
		2.69	73103.99	217.37	-1081.04	0.00	-105.77	0.00
		5.39	73693.22	217.37	-1316.73	0.00	3122.33	-585.30
F38	COMB1	0.00	-26097.49	613.11	881.97	0.00	1951.70	1650.85
		2.69	-25508.25	613.11	646.28	0.00	-105.77	0.00
		5.39	-24919.02	613.11	410.59	0.00	-1528.62	-1650.85
F39	COMB1	0.00	-26091.07	-344.37	881.92	0.00	1951.57	-927.25
		2.69	-25501.84	-344.37	646.23	0.00	-105.77	0.00
		5.39	-24912.61	-344.37	410.54	0.00	-1528.48	927.25
F40	COMB1	0.00	23645.47	-1233.30	22.76	0.00	-361.80	-3320.75
		2.69	24234.70	-1233.30	-212.93	0.00	-105.77	0.00
		5.39	24823.93	-1233.30	-448.63	0.00	784.89	3320.75
F41	COMB1	0.00	23543.19	960.00	24.75	0.00	-356.44	2584.87
		2.69	24132.42	960.00	-210.94	0.00	-105.77	0.00
		5.39	24721.65	960.00	-446.64	0.00	779.52	-2584.87
F42	COMB1	0.00	23581.36	1235.41	-17.09	0.00	-469.10	3326.44
		2.69	24170.60	1235.41	-252.78	0.00	-105.77	0.00
		5.39	24759.83	1235.41	-488.48	0.00	892.18	-3326.44
F43	COMB1	0.00	23321.55	-958.26	-14.62	0.00	-462.46	-2580.18
		2.69	23910.78	-958.26	-250.32	0.00	-105.77	0.00
		5.39	24500.01	-958.26	-486.01	0.00	885.54	2580.18
F44	COMB1	0.00	-26050.58	-611.86	914.68	0.00	2039.76	-1647.49
		2.69	-25461.35	-611.86	678.98	0.00	-105.77	0.00
		5.39	-24872.11	-611.86	443.29	0.00	-1616.67	1647.49
F45	COMB1	0.00	-25883.88	341.29	914.57	0.00	2039.47	918.95
		2.69	-25294.65	341.29	678.87	0.00	-105.77	0.00
		5.39	-24705.42	341.29	443.18	0.00	-1616.38	-918.95
F46	COMB1							

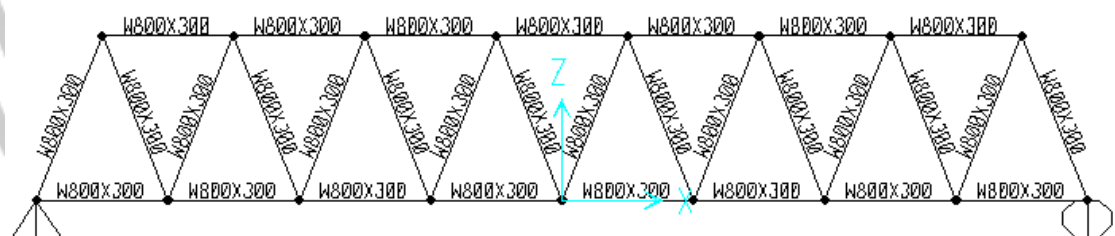
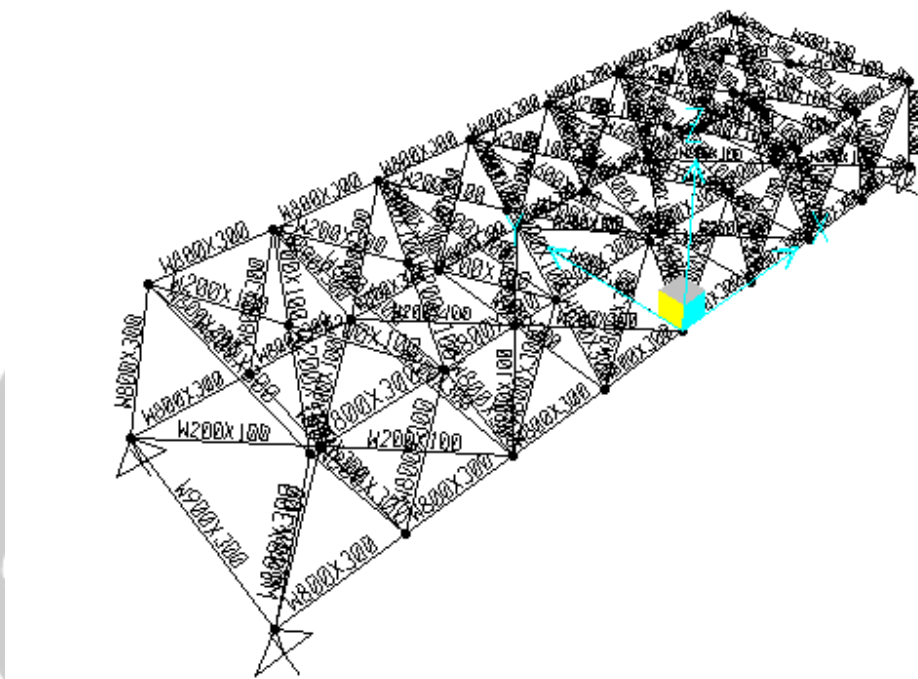
		0.00	72884.91	640.86	-882.55	0.00	-2799.42	1725.57
		2.69	73474.15	640.86	-1118.24	0.00	-105.77	0.00
		5.39	74063.38	640.86	-1353.94	0.00	3222.50	-1725.57
F47	COMB1							
		0.00	72328.87	-211.29	-878.21	0.00	-2787.75	-568.91
		2.69	72918.10	-211.29	-1113.91	0.00	-105.77	0.00
		5.39	73507.34	-211.29	-1349.60	0.00	3210.83	568.91
F48	COMB1							
		0.00	-75600.41	-846.54	1719.77	0.00	4207.55	-2279.38
		2.69	-75011.18	-846.54	1484.08	0.00	-105.77	0.00
		5.39	-74421.94	-846.54	1248.39	0.00	-3784.47	2279.38
F49	COMB1							
		0.00	-75123.50	871.15	1718.19	0.00	4203.27	2345.63
		2.69	-74534.27	871.15	1482.49	0.00	-105.77	0.00
		5.39	-73945.04	871.15	1246.80	0.00	-3780.19	-2345.63
F50	COMB1							
		0.00	123336.38	873.17	-1609.67	0.00	-4757.24	2351.09
		2.69	123925.61	873.17	-1845.36	0.00	-105.77	0.00
		5.39	124514.84	873.17	-2081.05	0.00	5180.32	-2351.09
F51	COMB1							
		0.00	122412.60	-619.71	-1604.65	0.00	-4743.72	-1668.63
		2.69	123001.83	-619.71	-1840.34	0.00	-105.77	0.00
		5.39	123591.07	-619.71	-2076.03	0.00	5166.80	1668.63
F52	COMB1							
		0.00	-126499.49	-205.65	2345.53	0.00	5892.46	-553.74
		2.69	-125910.26	-205.65	2109.84	0.00	-105.77	0.00
		5.39	-125321.03	-205.65	1874.15	0.00	-5469.38	553.74
F53	COMB1							
		0.00	-125637.75	379.29	2341.00	0.00	5880.26	1021.27
		2.69	-125048.52	379.29	2105.31	0.00	-105.77	0.00
		5.39	-124459.29	379.29	1869.61	0.00	-5457.17	-1021.27
F54	COMB1							
		0.00	174275.22	218.23	-2102.59	0.00	-6084.48	587.60
		2.69	174864.45	218.23	-2338.28	0.00	-105.77	0.00
		5.39	175453.68	218.23	-2573.98	0.00	6507.56	-587.60
F55	COMB1							
		0.00	172866.86	-75.69	-2095.91	0.00	-6066.48	-203.82
		2.69	173456.09	-75.69	-2331.60	0.00	-105.77	0.00
		5.39	174045.32	-75.69	-2567.29	0.00	6489.56	203.82
F56	COMB1							
		0.00	-184076.09	426.60	2673.92	0.00	6776.66	1148.65
		2.69	-183486.86	426.60	2438.22	0.00	-105.77	0.00
		5.39	-182897.62	426.60	2202.53	0.00	-6353.58	-1148.65
F57	COMB1							
		0.00	-182664.54	657.72	2668.93	0.00	6763.22	1770.96
		2.69	-182075.31	657.72	2433.23	0.00	-105.77	0.00
		5.39	-181486.07	657.72	2197.54	0.00	-6340.14	-1770.96
F58	COMB1							
		0.00	2776.62	-749.89	-1.17	0.00	-5.29	-1094.10
		2.25	2776.62	-369.82	-1.17	0.00	-2.64	165.59
		4.50	2776.62	10.25	-1.17	0.00	0.00	570.11
		6.75	2776.62	390.32	-1.17	0.00	2.64	119.47
		9.00	2776.62	770.39	-1.17	0.00	5.29	-1186.33
F59	COMB1							
		0.00	-127226.04	-4.266E-01	5785.77	0.00	10943.03	-8.531E-01
		1.00	-127226.04	-4.266E-01	5550.08	0.00	5275.10	-4.266E-01
		2.00	-127226.04	-4.266E-01	5314.39	0.00	-157.13	0.00
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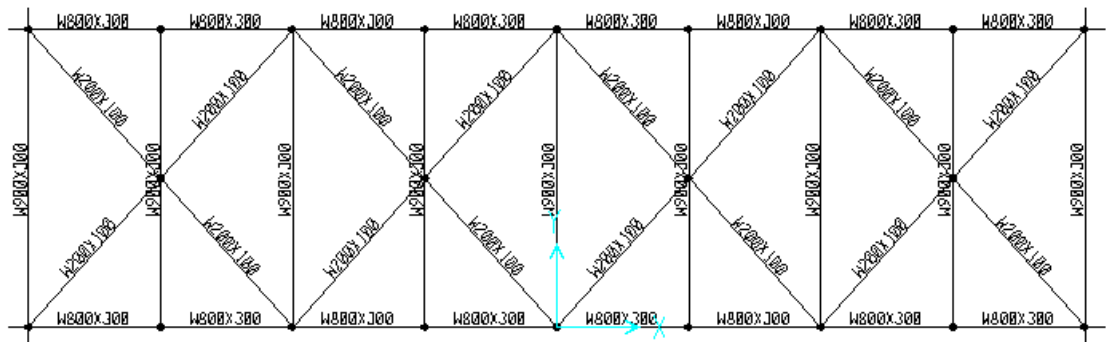
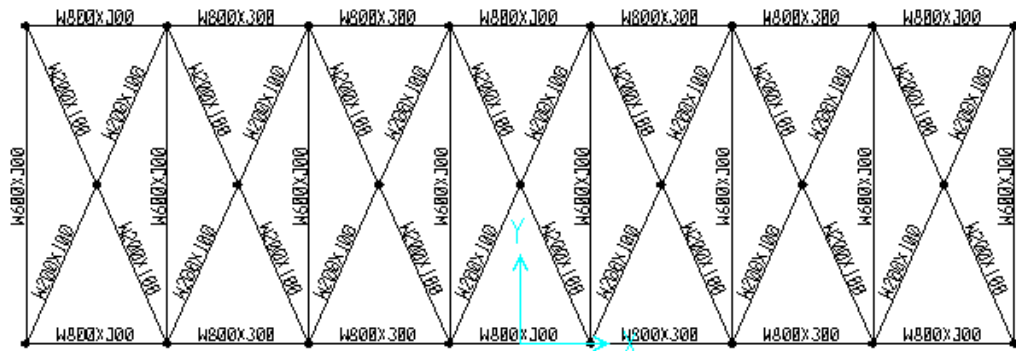
		4.00	-127226.04	-4.266E-01	4843.00	0.00	-10314.52	8.531E-01
F60	COMB1	0.00	-3246.19	-281.57	4.29	0.00	21.15	-655.20
		2.46	-3246.19	-170.18	4.29	0.00	10.57	-99.05
		4.92	-3246.19	-58.79	4.29	0.00	0.00	182.84
		7.39	-3246.19	52.59	4.29	0.00	-10.57	190.47
		9.85	-3246.19	163.98	4.29	0.00	-21.15	-76.15
F61	COMB1	0.00	-2759.56	-281.05	-4.77	0.00	-23.49	-652.68
		2.46	-2759.56	-169.67	-4.77	0.00	-11.75	-97.79
		4.92	-2759.56	-58.28	-4.77	0.00	0.00	182.84
		7.39	-2759.56	53.11	-4.77	0.00	11.75	189.21
		9.85	-2759.56	164.49	-4.77	0.00	23.49	-78.68
F62	COMB1	0.00	-126169.50	-597.95	5764.71	0.00	10900.90	-1195.90
		1.00	-126169.50	-597.95	5529.02	0.00	5254.04	-597.95
		2.00	-126169.50	-597.95	5293.32	0.00	-157.13	0.00
		3.00	-126169.50	-597.95	5057.63	0.00	-5332.60	597.95
		4.00	-126169.50	-597.95	4821.94	0.00	-10272.39	1195.90
F63	COMB1	0.00	6241.21	-732.86	-9.313E-01	0.00	-4.19	-1017.46
		2.25	6241.21	-352.79	-9.313E-01	0.00	-2.10	203.90
		4.50	6241.21	27.28	-9.313E-01	0.00	0.00	570.11
		6.75	6241.21	407.35	-9.313E-01	0.00	2.10	81.15
		9.00	6241.21	787.42	-9.313E-01	0.00	4.19	-1262.97
F64	COMB1	0.00	-215563.65	-38.39	4285.51	0.00	7942.50	-76.78
		1.00	-215563.65	-38.39	4049.82	0.00	3774.84	-38.39
		2.00	-215563.65	-38.39	3814.12	0.00	-157.13	0.00
		3.00	-215563.65	-38.39	3578.43	0.00	-3853.40	38.39
		4.00	-215563.65	-38.39	3342.74	0.00	-7313.99	76.78
F65	COMB1	0.00	-4839.49	-264.37	-7.85	0.00	-38.67	-570.54
		2.46	-4839.49	-152.99	-7.85	0.00	-19.34	-56.72
		4.92	-4839.49	-41.60	-7.85	0.00	0.00	182.84
		7.39	-4839.49	69.78	-7.85	0.00	19.34	148.14
		9.85	-4839.49	181.17	-7.85	0.00	38.67	-160.81
F66	COMB1	0.00	-5350.81	-265.24	7.49	0.00	36.91	-574.81
		2.46	-5350.81	-153.85	7.49	0.00	18.45	-58.86
		4.92	-5350.81	-42.47	7.49	0.00	0.00	182.84
		7.39	-5350.81	68.92	7.49	0.00	-18.45	150.27
		9.85	-5350.81	180.30	7.49	0.00	-36.91	-156.55
F67	COMB1	0.00	-213602.62	-505.35	4274.58	0.00	7920.64	-1010.70
		1.00	-213602.62	-505.35	4038.89	0.00	3763.91	-505.35
		2.00	-213602.62	-505.35	3803.19	0.00	-157.13	0.00
		3.00	-213602.62	-505.35	3567.50	0.00	-3842.47	505.35
		4.00	-213602.62	-505.35	3331.81	0.00	-7292.13	1010.70
F68	COMB1	0.00	8948.75	-724.03	-4.793E-01	0.00	-2.16	-977.70
		2.25	8948.75	-343.96	-4.793E-01	0.00	-1.08	223.78
		4.50	8948.75	36.11	-4.793E-01	0.00	0.00	570.11
		6.75	8948.75	416.19	-4.793E-01	0.00	1.08	61.27
		9.00	8948.75	796.26	-4.793E-01	0.00	2.16	-1302.73
F69	COMB1	0.00	-268006.59	-47.06	2446.38	0.00	4264.25	-94.11
		1.00	-268006.59	-47.06	2210.69	0.00	1935.71	-47.06
		2.00	-268006.59	-47.06	1975.00	0.00	-157.13	0.00
		3.00	-268006.59	-47.06	1739.30	0.00	-2014.28	47.06
		4.00	-268006.59	-47.06	1503.61	0.00	-3635.74	94.11

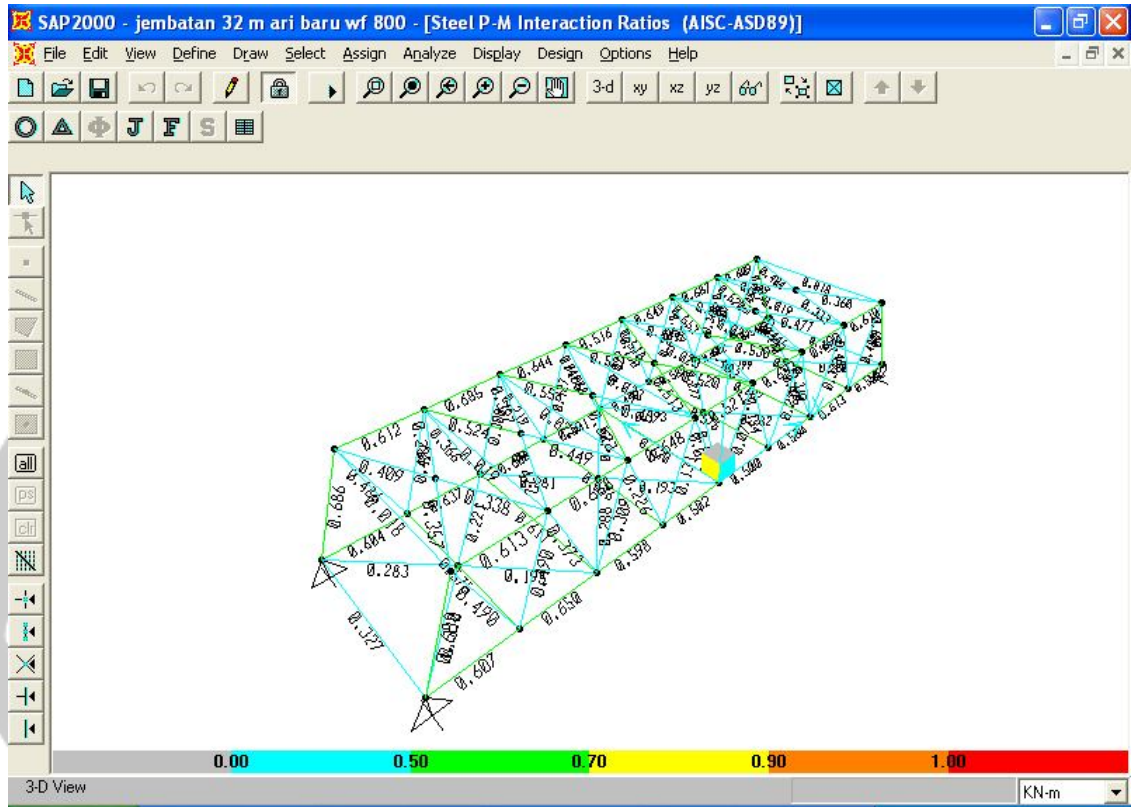
F70	COMB1	0.00	-6478.97	-245.06	9.48	0.00	46.66	-475.44
		2.46	-6478.97	-133.68	9.48	0.00	23.33	-9.17
		4.92	-6478.97	-22.29	9.48	0.00	0.00	182.84
		7.39	-6478.97	89.10	9.48	0.00	-23.33	100.59
		9.85	-6478.97	200.48	9.48	0.00	-46.66	-255.91
F71	COMB1	0.00	-6126.65	-244.02	-9.62	0.00	-47.35	-470.29
		2.46	-6126.65	-132.63	-9.62	0.00	-23.68	-6.60
		4.92	-6126.65	-21.24	-9.62	0.00	0.00	182.84
		7.39	-6126.65	90.14	-9.62	0.00	23.68	98.02
		9.85	-6126.65	201.53	-9.62	0.00	47.35	-261.06
F72	COMB1	0.00	-265448.24	-263.71	2440.93	0.00	4253.35	-527.42
		1.00	-265448.24	-263.71	2205.24	0.00	1930.26	-263.71
		2.00	-265448.24	-263.71	1969.54	0.00	-157.13	0.00
		3.00	-265448.24	-263.71	1733.85	0.00	-2008.83	263.71
		4.00	-265448.24	-263.71	1498.16	0.00	-3624.83	527.42
F73	COMB1	0.00	10204.98	-719.62	1.105E-01	0.00	4.971E-01	-957.86
		2.25	10204.98	-339.55	1.105E-01	0.00	2.486E-01	233.70
		4.50	10204.98	40.52	1.105E-01	0.00	0.00	570.11
		6.75	10204.98	420.59	1.105E-01	0.00	-2.486E-01	51.35
		9.00	10204.98	800.67	1.105E-01	0.00	-4.971E-01	-1322.57
F74	COMB1	0.00	-285608.31	4.39	435.83	0.00	243.14	8.78
		1.00	-285608.31	4.39	200.13	0.00	-74.84	4.39
		2.00	-285608.31	4.39	-35.56	0.00	-157.13	0.00
		3.00	-285608.31	4.39	-271.25	0.00	-3.72	-4.39
		4.00	-285608.31	4.39	-506.95	0.00	385.38	-8.78
F75	COMB1	0.00	-6661.48	-221.84	-10.11	0.00	-49.77	-361.08
		2.46	-6661.48	-110.45	-10.11	0.00	-24.88	48.01
		4.92	-6661.48	9.336E-01	-10.11	0.00	0.00	182.84
		7.39	-6661.48	112.32	-10.11	0.00	24.88	43.41
		9.85	-6661.48	223.71	-10.11	0.00	49.77	-370.27
F76	COMB1	0.00	-6769.59	-222.93	10.24	0.00	50.41	-366.47
		2.46	-6769.59	-111.55	10.24	0.00	25.20	45.31
		4.92	-6769.59	-1.607E-01	10.24	0.00	0.00	182.84
		7.39	-6769.59	111.23	10.24	0.00	-25.20	46.11
		9.85	-6769.59	222.61	10.24	0.00	-50.41	-364.88
F77	COMB1	0.00	-282824.28	3.61	436.92	0.00	245.32	7.23
		1.00	-282824.28	3.61	201.23	0.00	-73.75	3.61
		2.00	-282824.28	3.61	-34.47	0.00	-157.13	0.00
		3.00	-282824.28	3.61	-270.16	0.00	-4.82	-3.61
		4.00	-282824.28	3.61	-505.85	0.00	383.19	-7.23
F78	COMB1	0.00	10209.46	-720.50	7.522E-01	0.00	3.39	-961.83
		2.25	10209.46	-340.43	7.522E-01	0.00	1.69	231.72
		4.50	10209.46	39.64	7.522E-01	0.00	0.00	570.11
		6.75	10209.46	419.71	7.522E-01	0.00	-1.69	53.34
		9.00	10209.46	799.78	7.522E-01	0.00	-3.39	-1318.60
F79	COMB1	0.00	-268203.66	60.21	-1562.45	0.00	-3753.42	120.43
		1.00	-268203.66	60.21	-1798.14	0.00	-2073.12	60.21
		2.00	-268203.66	60.21	-2033.84	0.00	-157.13	0.00
		3.00	-268203.66	60.21	-2269.53	0.00	1994.56	-60.21
		4.00	-268203.66	60.21	-2505.22	0.00	4381.93	-120.43
F80	COMB1							

		0.00	-6233.31	-200.87	9.75	0.00	48.03	-257.80
		2.46	-6233.31	-89.48	9.75	0.00	24.02	99.65
		4.92	-6233.31	21.91	9.75	0.00	0.00	182.84
		7.39	-6233.31	133.29	9.75	0.00	-24.02	-8.23
		9.85	-6233.31	244.68	9.75	0.00	-48.03	-473.55
F81	COMB1							
		0.00	-6371.92	-199.86	-9.35	0.00	-46.05	-252.86
		2.46	-6371.92	-88.48	-9.35	0.00	-23.02	102.12
		4.92	-6371.92	22.91	-9.35	0.00	0.00	182.84
		7.39	-6371.92	134.30	-9.35	0.00	23.02	-10.70
		9.85	-6371.92	245.68	-9.35	0.00	46.05	-478.50
F82	COMB1							
		0.00	-265586.03	269.95	-1555.40	0.00	-3739.32	539.89
		1.00	-265586.03	269.95	-1791.10	0.00	-2066.07	269.95
		2.00	-265586.03	269.95	-2026.79	0.00	-157.13	0.00
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F83	COMB1							
		0.00	8993.38	-726.20	1.36	0.00	6.10	-987.48
		2.25	8993.38	-346.13	1.36	0.00	3.05	218.90
		4.50	8993.38	33.94	1.36	0.00	0.00	570.11
		6.75	8993.38	414.01	1.36	0.00	-3.05	66.16
		9.00	8993.38	794.09	1.36	0.00	-6.10	-1292.95
F84	COMB1							
		0.00	-215877.10	55.30	-3362.51	0.00	-7353.53	110.61
		1.00	-215877.10	55.30	-3598.20	0.00	-3873.18	55.30
		2.00	-215877.10	55.30	-3833.90	0.00	-157.13	0.00
		3.00	-215877.10	55.30	-4069.59	0.00	3794.61	-55.30
		4.00	-215877.10	55.30	-4305.28	0.00	7982.05	-110.61
F85	COMB1							
		0.00	-5248.97	-180.13	-7.37	0.00	-36.29	-155.67
		2.46	-5248.97	-68.74	-7.37	0.00	-18.15	150.71
		4.92	-5248.97	42.65	-7.37	0.00	0.00	182.84
		7.39	-5248.97	154.03	-7.37	0.00	18.15	-59.29
		9.85	-5248.97	265.42	-7.37	0.00	36.29	-575.68
F86	COMB1							
		0.00	-4937.87	-180.92	8.00	0.00	39.40	-159.59
		2.46	-4937.87	-69.54	8.00	0.00	19.70	148.75
		4.92	-4937.87	41.85	8.00	0.00	0.00	182.84
		7.39	-4937.87	153.24	8.00	0.00	-19.70	-57.33
		9.85	-4937.87	264.62	8.00	0.00	-39.40	-571.76
F87	COMB1							
		0.00	-213816.60	522.11	-3350.65	0.00	-7329.82	1044.21
		1.00	-213816.60	522.11	-3586.34	0.00	-3861.32	522.11
		2.00	-213816.60	522.11	-3822.04	0.00	-157.13	0.00
		3.00	-213816.60	522.11	-4057.73	0.00	3782.75	-522.11
		4.00	-213816.60	522.11	-4293.42	0.00	7958.33	-1044.21
F88	COMB1							
		0.00	6286.74	-735.79	1.83	0.00	8.24	-1030.62
		2.25	6286.74	-355.72	1.83	0.00	4.12	197.33
		4.50	6286.74	24.36	1.83	0.00	0.00	570.11
		6.75	6286.74	404.43	1.83	0.00	-4.12	87.73
		9.00	6286.74	784.50	1.83	0.00	-8.24	-1249.81
F89	COMB1							
		0.00	-127490.20	26.11	-4798.51	0.00	-10225.53	52.22
		1.00	-127490.20	26.11	-5034.20	0.00	-5309.17	26.11
		2.00	-127490.20	26.11	-5269.89	0.00	-157.13	0.00
		3.00	-127490.20	26.11	-5505.58	0.00	5230.61	-26.11
		4.00	-127490.20	26.11	-5741.28	0.00	10854.04	-52.22
F90	COMB1							
		0.00	-2847.95	-164.94	4.92	0.00	24.24	-80.90

		2.46	-2847.95	-53.56	4.92	0.00	12.12	188.10
		4.92	-2847.95	57.83	4.92	0.00	0.00	182.84
		7.39	-2847.95	169.22	4.92	0.00	-12.12	-96.68
		9.85	-2847.95	280.60	4.92	0.00	-24.24	-650.45
F91	COMB1							
		0.00	-3159.75	-164.49	-4.16	0.00	-20.48	-78.69
		2.46	-3159.75	-53.11	-4.16	0.00	-10.24	189.20
		4.92	-3159.75	58.28	-4.16	0.00	0.00	182.84
		7.39	-3159.75	169.66	-4.16	0.00	10.24	-97.78
		9.85	-3159.75	281.05	-4.16	0.00	20.48	-652.66
F92	COMB1							
		0.00	-126332.01	630.43	-4778.83	0.00	-10186.17	1260.85
		1.00	-126332.01	630.43	-5014.52	0.00	-5289.50	630.43
		2.00	-126332.01	630.43	-5250.22	0.00	-157.13	0.00
		3.00	-126332.01	630.43	-5485.91	0.00	5210.93	-630.43
		4.00	-126332.01	630.43	-5721.60	0.00	10814.69	-1260.85
F93	COMB1							
		0.00	2782.75	-751.70	2.10	0.00	9.44	-1102.20
		2.25	2782.75	-371.62	2.10	0.00	4.72	161.53
		4.50	2782.75	8.45	2.10	0.00	0.00	570.11
		6.75	2782.75	388.52	2.10	0.00	-4.72	123.52
		9.00	2782.75	768.59	2.10	0.00	-9.44	-1178.23









TUGAS AKHIR
PERANCANGAN
JEMBATAN WOTCALEH
BANTUL YOGYAKARTA

JUDUL GAMBAR

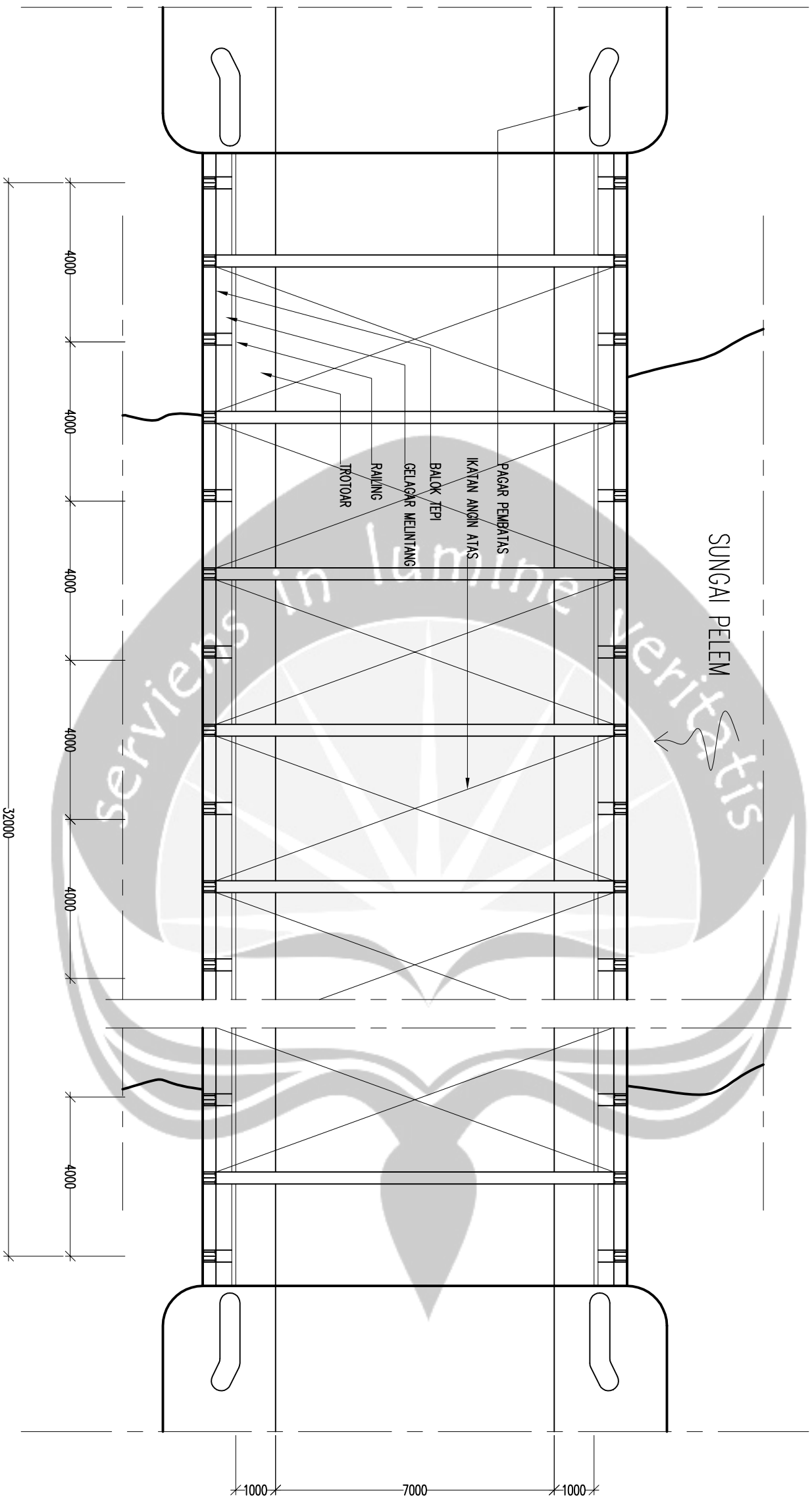
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SKALA

DIGAMBAR OLEH

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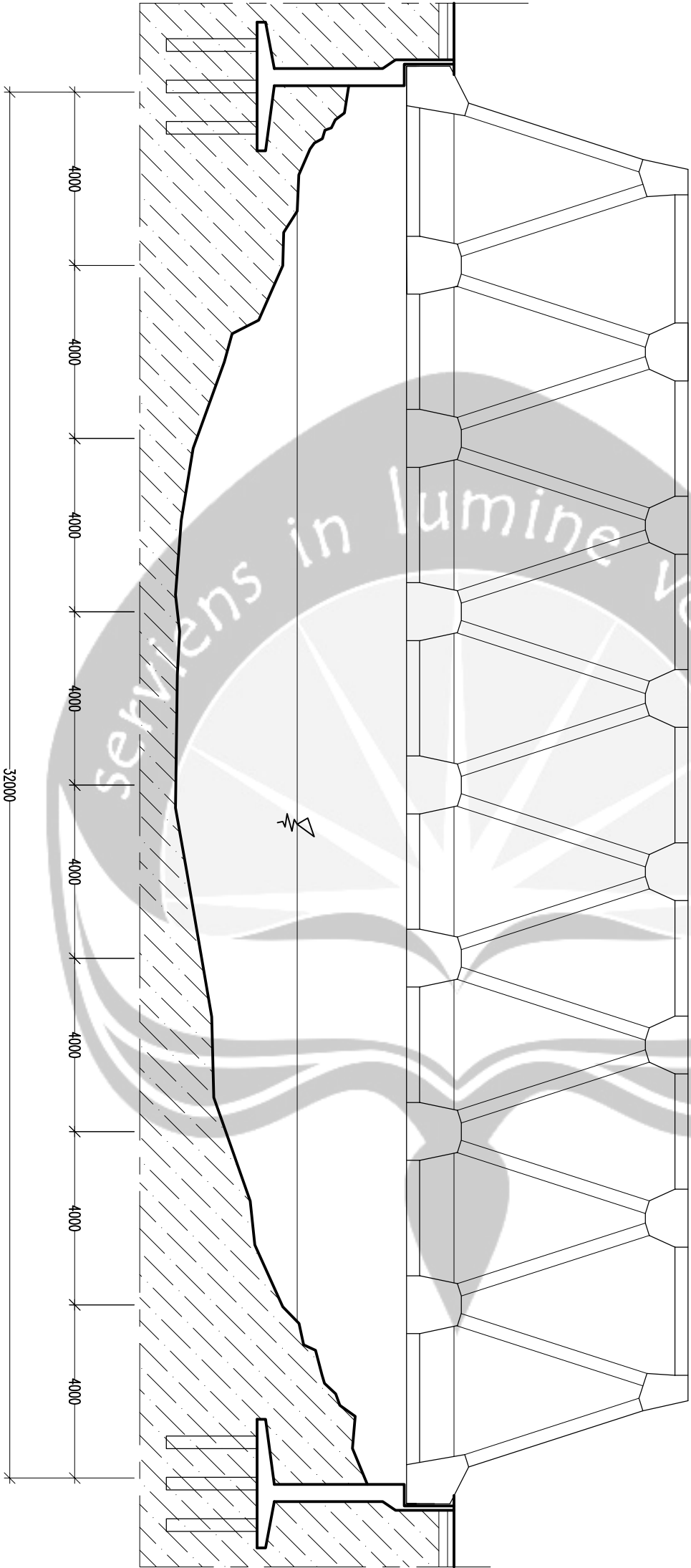
HENDRIK TH N N
F RODRIGUEZ



TAMPAK ATAS JEMBATAN
SKALA 1:125



TUGAS AKHIR
PERANCANGAN
JEMBATAN WOTGALEH
BANTUL YOGYAKARTA

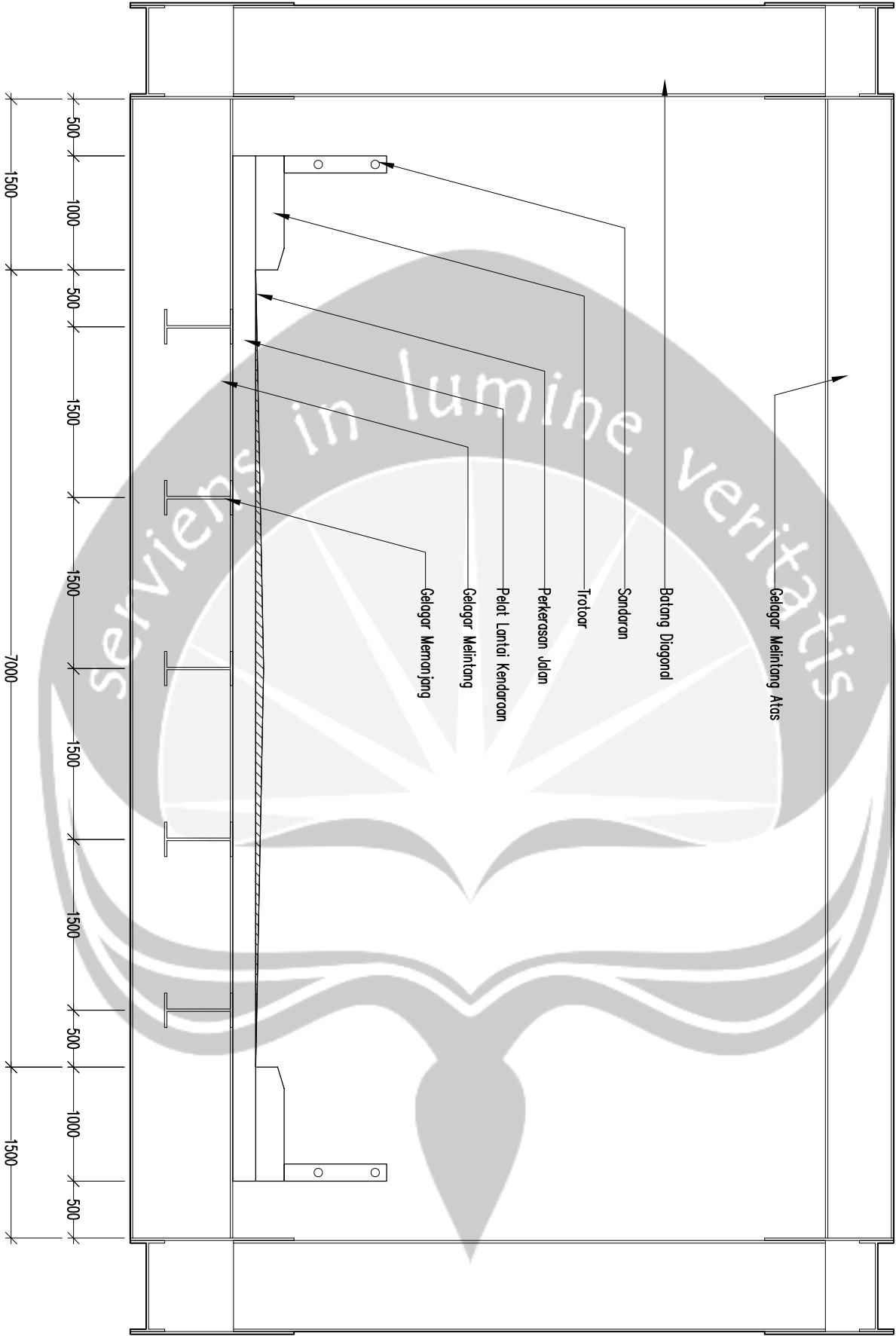


TAMPAK SAMPING JEMBATAN
SKALA 1:125

JUDUL GAMBAR	
TAMPAK SAMPING JEMBATAN	
SKALA	DIGAMBAR OLEH
1:125	HENDRIK TH N N F RODRIGUEZ



TUGAS AKHIR
PERANCANGAN
JEMBATAN WOTCALEH
BANTUL YOGYAKARTA



POTONGAN MELINTANG JEMBATAN
SKALA 1:50

JUDUL GAMBAR	
POTONGAN MELINTANG JEMBATAN	
SKALA	DIGAMBAR OLEH
1:50	HENDRIK TH N N F RODRIGUEZ



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PENULANGAN PLAT LANTAI

SKALA	DIGAMBAR OLEH
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HENDRIK TH N
F RODRIGUEZ



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DETAIL SAMBUNGAN

1:10

HENDRIK TH N
F RODRIGUEZ



TUGAS AKHIR
PERANCANGAN
JEMBATAN WOTGALEH
BANTUL YOGYAKARTA

JUDUL GAMBAR

DETAIL SAMBUNGAN

SKALA

DIGAMBAR OLEH

1:10

HENDRIK TH N N
F RODRIGUEZ

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32 BAUT Ø 25MM

32 BAUT Ø 25MM
DETAIL SAMBUNGAN 2
SKALA 1:10

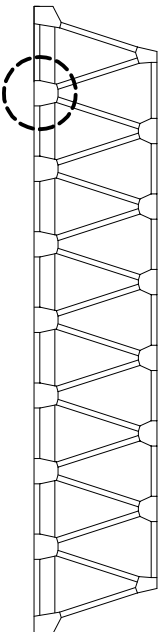
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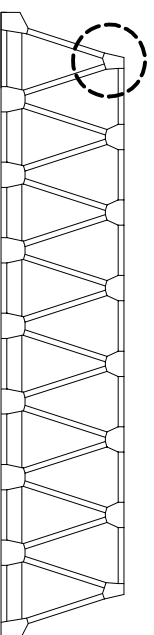
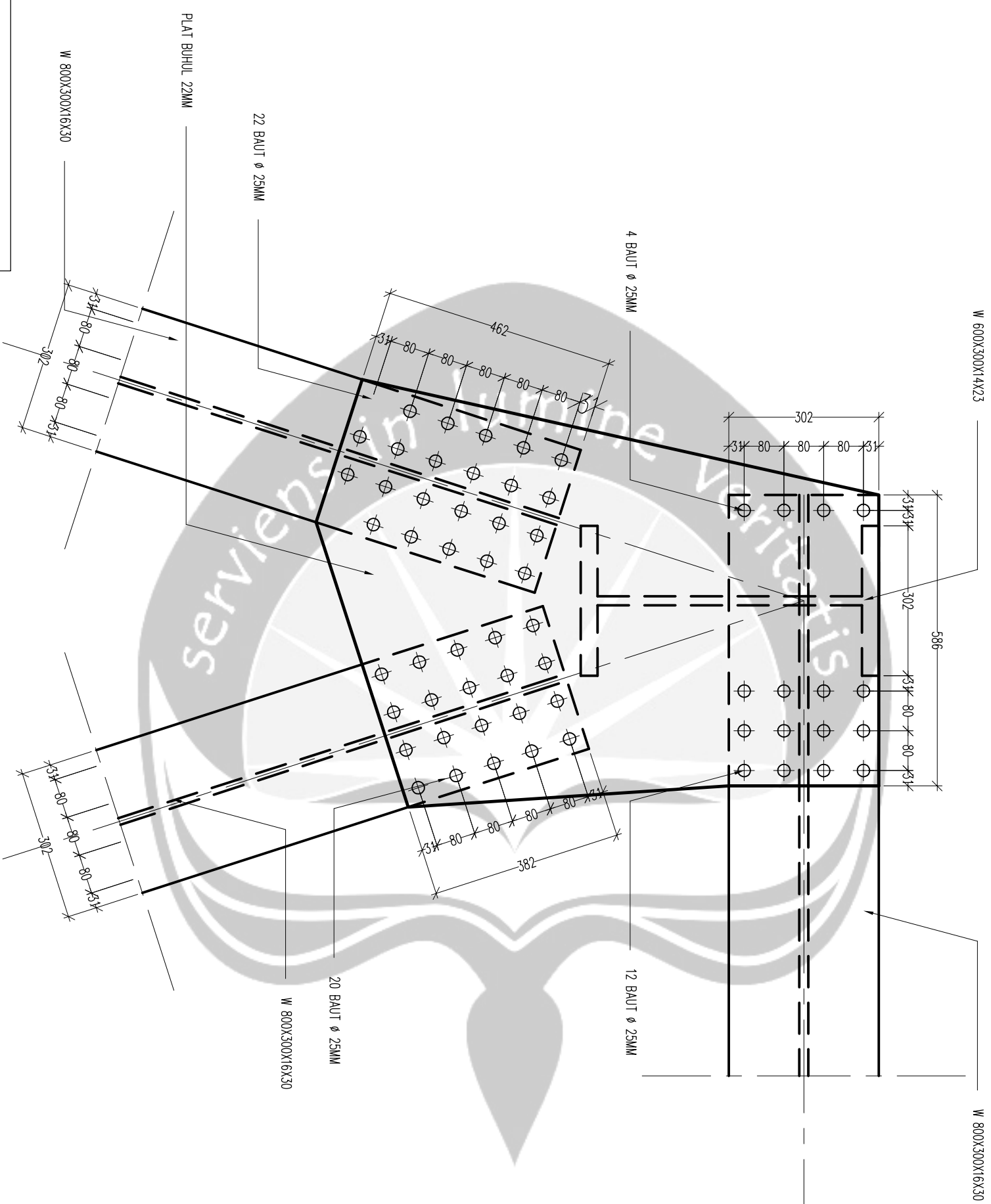
20 BAUT Ø 25MM

PLAT BUKUL 22MM





**TUGAS AKHIR
PERANCANGAN
JEMBATAN WOTGALEH
BANTUL YOGYAKARTA**



DETAIL SAMBUNGAN 3
SKALA 1:10

JUDUL GAMBAR	
DETAIL SAMBUNGAN	
SKALA	DIGAMBAR ULEH
1:10	HENDRIK TH N N F RODRIGUEZ



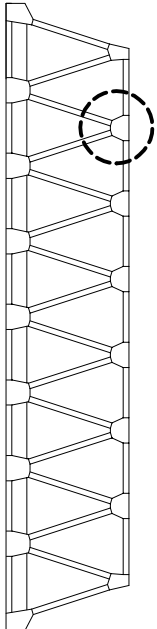
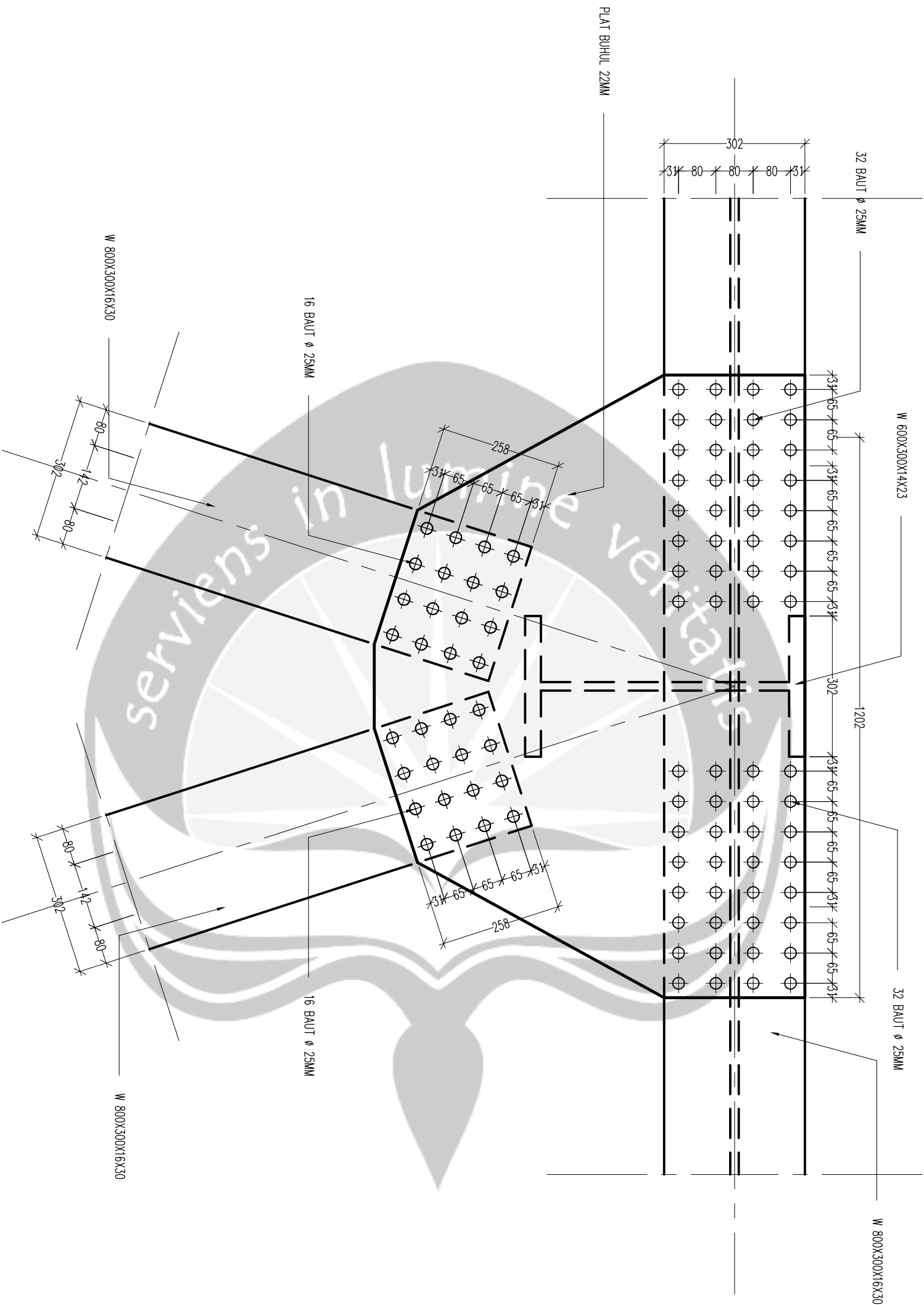
TUGAS AKHIR
PERANCANGAN
JEMBATAN WOTGALEH
BANTUL YOGYAKARTA

JUDUL GAMBAR

DETAIL SAMBUNGAN

SKALA DIGAMBAR OLEH

1:10 HENDRIK TH N N
F RODRIGUEZ



DETAIL SAMBUNGAN 4
SKALA 1:10